10/088,916

G1 C, O, S, N

G2 O, N

G3 O, S

G4 H,O,Me,Et

Structure attributes must be viewed using STN Express query preparation.

=> d 12

L2 HAS NO ANSWERS

L2 STR

G1 C,O,S,N

G2 O,N

G3 0,5

G4 H,O,Me,Et

Structure attributes must be viewed using STN Express query preparation.

=> s 11 sss full

FULL SEARCH INITIATED 11:18:04 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 61693 TO ITERATE

100.0% PROCESSED 61693 ITERATIONS

166 ANSWERS

SEARCH TIME: 00.00.03

L3 166 SEA SSS FUL L1

=> s 12 sss full

FULL SEARCH INITIATED 11:18:13 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 61693 TO ITERATE

100.0% PROCESSED 61693 ITERATIONS

166 ANSWERS

SEARCH TIME: 00.00.02

L4 166 SEA SSS FUL L2

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY SESSION 310.84 311.05

FILE 'CAPLUS' ENTERED AT 11:18:28 ON 19 AUG 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 19 Aug 2004 VOL 141 ISS 8 FILE LAST UPDATED: 18 Aug 2004 (20040818/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13 or 14

5 L3

5 L4

L5 5 L3 OR L4

=> d 15 1-5 ibib abs hitstr

L5 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN ACCESSION NUMBER: 2004:467862 CAPLUS

DOCUMENT NUMBER: 141:38441

TITLE:

Preparation of N-(carbamimidoylbenzyl)benzeneacetamide

s and pyridineacetamides as inhibitors of the

formation of coagulation factors Xa, IXa, and thrombin

induced by factor VIIa and tissue factor

INVENTOR(S):

Banner, David William; Gobbi, Luca Claudio; Groebke, Zbinden Katrin; Obst, Ulrike; Stahl, Christoph Martin

F. Hoffmann-La Roche A.-G., Switz.

PATENT ASSIGNEE(S): PCT Int. Appl., 183 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -<del>--</del>-----\_\_\_\_\_\_ \_\_\_\_ \_\_\_\_\_ WO 2004048335 A2 20040610 WO 2003-EP13087 20031121 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,

GQ, GW, ML, MR, NE, SN, TD, TG US 2004122057 20040624 US 2003-720790 A1 20031121 PRIORITY APPLN. INFO.: EP 2002-26365 A 20021125

OTHER SOURCE(S):

MARPAT 141:38441

GΙ

NH2, or (un) substituted (aryl) alkoxycarbonyl, aryloxycarbamoyl, alkanoyl, arylcarbonyl; R2-R4 = independently H, halo, OH, carboxyalkylamino, carbamoylalkylamino, hydroxycycloalkyloxy, (hetero)aryl(oxy), (hetero)aryl(alkyl)amino, etc.; R5 = (cyclo)alkyl; or if X = 0 or NR12, R5 may be H; R6 = H, (fluoro)alkyl; R7-R11 = independently H, OH, halo, NO2, CHO, or (un) substituted amino, fluoroalkyl, alkoxy, (hetero) aryl (oxy), heterocyclylalkyl, carbamoyl, cycloalkyl(alkoxy), etc.; or R8 and R9 or R8 and R7 are bound to each other to form a ring together with the C's to which they are attached; R12 = H, alkyl(carbonyl); and pharmaceutically acceptable salts thereof] were prepared as inhibitors of the formation of coagulation factors Xa, IXa, and thrombin induced by factor VIIa and tissue factor. For example, 6-fluoroveratraldehyde was converted to (2-fluoro-4,5-dimethoxyphenyl) methoxyacetic acid, which was coupled with 4-aminomethylbenzonitrile to give N-(4-cyanobenzyl)-2-(2-fluoro-4,5dimethoxyphenyl)-2-methoxyacetamide. Reaction of the nitrile with dry HCl gas in CHCl3/EtOH afforded the amidine II.HCl. The latter suppressed the amidolytic activity of the factor VIIa/tissue factor complex with Ki of 2.21 µM. Thus, I and their pharmaceutical compns. are useful for the treatment and/or prophylaxis of arterial and venous thrombosis, deep vein thrombosis, pulmonary embolism, unstable angina pectoris, cardiac infarction, stroke due to atrial fibrillation, inflammation, arteriosclerosis, and/or tumors (no data).

**701269-34-3P**, N-(4-Carbamimidoylbenzyl)-2-[2,6-difluoro-3-[(phenylacetyl)amino]phenyl]-2-methoxyacetamide hydrochloride RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(anticoagulant; preparation of N-(carbamimidoylbenzyl)benzeneacetamides and pyridineacetamides as coagulation factor inhibitors)

701269-34-3 CAPLUS RN

Benzeneacetamide, N-[[4-(aminoiminomethyl)phenyl]methyl]-2,6-difluoroα-methoxy-3-[(phenylacetyl)amino]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

2002:793586 CAPLUS

IT

CN

137:310909

TITLE:

Preparation of aminomethylphenylalkanoic acid derivatives as remedies for diabetes, digestive tract

diseases, etc.

INVENTOR(S):

Matsuura, Fumiyoshi; Emori, Eita; Shinoda, Masanobu; Clark, Richard; Kasai, Shunji; Yoshitomi, Hideki; Yamazaki, Kazuto; Inoue, Takashi; Miyashita, Sadakazu;

Hihara, Taro

PATENT ASSIGNEE(S): SOURCE:

Eisai Co., Ltd., Japan

PCT Int. Appl., 100 pp.

DOCUMENT TYPE:

CODEN: PIXXD2

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PAT                    | ENT 1 | 10.  |     |     | KIN | D    | DATE  |      |                | APPL |      |      |     |      | D.       | ATE  |     |  |
|------------------------|-------|------|-----|-----|-----|------|-------|------|----------------|------|------|------|-----|------|----------|------|-----|--|
| WO                     | 20020 | 0814 | 28  |     | A1  | -    | 2002  | 1017 |                |      |      |      |     |      | 2        | 0020 | 327 |  |
|                        |       |      |     |     |     |      | AU,   |      |                |      |      |      |     |      |          |      |     |  |
|                        |       |      |     |     |     |      |       |      |                |      |      |      |     |      |          |      |     |  |
|                        |       |      |     |     |     |      | DK,   |      |                |      |      |      |     |      |          |      |     |  |
|                        |       | GM,  | HR, | ΗU, | ID, | IL,  | IN,   | IS,  | JP,            | KE,  | KG,  | KP,  | KR, | KZ,  | LC,      | LK,  | LR, |  |
|                        |       | LS,  | LT, | LU, | LV, | MA,  | MD,   | MG,  | MK,            | MN,  | MW,  | MX,  | MZ, | NO,  | NZ,      | OM,  | PH, |  |
|                        |       | PL,  | PT, | RO, | RU, | SD,  | SE,   | SG,  | SI.            | SK,  | SL.  | TJ.  | TM. | TN.  | TR.      | TT.  | TZ. |  |
|                        |       |      |     |     |     |      | YU,   |      |                |      |      |      |     |      |          |      |     |  |
|                        |       | TJ,  |     |     |     |      | •     |      |                |      | •    |      | •   |      |          |      |     |  |
|                        | RW:   | GH,  | GM, | KE, | LS, | MW,  | MZ,   | SD,  | SL,            | SZ,  | TZ,  | ŪG,  | ZM, | ZW,  | AT,      | BE,  | CH, |  |
|                        |       | CY,  | DE, | DK, | ES, | FI,  | FR,   | GB,  | GR,            | IE,  | IT,  | LU,  | MC, | NL,  | PT,      | SE,  | TR. |  |
|                        |       |      |     |     |     |      | CM,   |      |                |      |      |      |     |      |          |      |     |  |
| EP                     |       |      |     |     |     |      |       |      | EP 2002-707187 |      |      |      |     |      | 20020327 |      |     |  |
|                        | R:    | ΑT,  | BE, | CH, | DE, | DK,  | ES,   | FR,  | GB,            | GR,  | IT,  | LI,  | LU, | NL,  | SE,      | MC,  | PT, |  |
|                        |       | ΙE,  | SI, | LT, | LV, | FI,  | RO,   | MK,  | CY,            | AL,  | TR   |      |     |      |          |      |     |  |
| US                     | 20041 | 382  | 71  |     | A1  |      | 2004  | 0715 |                | US 2 | 003- | 4712 | 54  |      | 2        | 0030 | 910 |  |
| PRIORITY APPLN. INFO.: |       |      |     |     |     |      |       | JP 2 | 001-           | 1006 | 78   | 7    | A 2 | 0010 | 330      |      |     |  |
|                        |       |      |     |     |     |      |       |      | WO 2           | 002- | JP30 | 02   | 7   | v 2  | 0020     | 327  |     |  |
| OTHER SOURCE(S):       |       |      |     | MAR | PAT | 137: | 31090 | 9    |                |      |      |      |     |      |          |      |     |  |

$$\begin{array}{c|c}
R1 \\
Z \\
R2 \\
R3
\end{array}$$

I

AB The title compds. I [X represents optionally substituted aryl or heteroaryl; Y represents a group represented by the general formula CONR11CR22R33 (wherein R11, R22, and R33 each represents hydrogen, etc.), etc.; Z represents a group represented by the general formula CR111R222(CR333R444)m (wherein m is 0 to 2 and R111, R222, R333, and R444 each represents hydrogen, etc.); and R1, R2, R3, and R4 each represents hydrogen, etc.] are prepared The in vitro bioactivity of compds. of this invention vs. PPAR  $\alpha$ , PPAR  $\beta$ , and PPAR  $\gamma$  was demonstrated.

## IΤ 470668-77-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and bioeffect of aminomethylphenylalkanoic acid derivs.) RN 470668-77-0 CAPLUS

CN Benzenepropanoic acid, 3-[[(4-chloro-2-fluorobenzoyl)amino]methyl]-4,5dimethoxy- $\alpha$ -(1-methylethoxy)- (9CI) (CA INDEX NAME)

IT 334011-61-9P 334011-62-0P 334011-63-1P 334011-64-2P 334011-65-3P 334011-75-5P 334011-76-6P 470668-01-0P 470668-05-4P 470668-06-5P 470668-07-6P 470668-08-7P 470668-09-8P 470668-12-3P 470668-13-4P 470668-14-5P 470668-12-3P 470668-18-9P 470668-14-5P 470668-22-5P 470668-23-6P 470668-24-7P 470668-23-6P 470668-28-1P 470668-29-2P 470668-31-6P 470668-32-7P 470668-33-8P 470668-33-8P 470668-39-4P 470668-39-4P 470668-39-4P 470668-39-4P 470668-39-4P 470668-35-2P 470668-51-0P 470668-55-1P 470668-53-2P 470668-54-3P 470668-55-4P 470668-53-2P 470668-54-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aminomethylphenylalkanoic acid derivs. as remedies for diabetes and digestive tract diseases)

RN 334011-61-9 CAPLUS

CN Benzenepropanoic acid, 3-[[(2,4-dichlorobenzoyl)amino]methyl]-2,4-dimethoxy-α-(1-methylethoxy)- (9CI) (CA INDEX NAME)

RN 334011-62-0 CAPLUS

CN Benzenepropanoic acid, 5-[[(2,4-dichlorobenzoyl)amino]methyl]-2,4-dimethoxy-α-(1-methylethoxy)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{C1} & \text{OMe} & \text{OMe} \\ \hline \\ \text{C-NH-CH}_2 & \text{CH}_2\text{-CH-CO}_2\text{H} \\ \end{array}$$

## 10/088,916

RN 334011-63-1 CAPLUS

CN Benzenepropanoic acid,  $3-[[(2,4-\text{dichlorobenzoyl})amino]methyl]-4,5-\text{dimethoxy}-\alpha-(1-methylethoxy)- (9CI) (CA INDEX NAME)$ 

RN 334011-64-2 CAPLUS

CN Benzenepropanoic acid, 3-bromo-5-[[(2,4-dichlorobenzoy1)amino]methyl]-4-methoxy- $\alpha$ -(1-methylethoxy)- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{DP} \\ \text{MeO} \\ \text{C-NH-CH}_2 \\ \text{CH}_2 - \text{CH-CO}_2 \text{H} \\ \text{Cl} \end{array}$$

RN 334011-65-3 CAPLUS

CN Benzenepropanoic acid, 3-cyano-5-[[(2,4-dichlorobenzoyl)amino]methyl]-4-methoxy- $\alpha$ -(1-methylethoxy)- (9CI) (CA INDEX NAME)

RN 334011-75-5 CAPLUS

CN 5-Benzofuranpropanoic acid, 7-[[(2,4-dichlorobenzoyl)amino]methyl]- $\alpha$ - (1-methylethoxy)- (9CI) (CA INDEX NAME)

) 10/088,916

CN

RN 470668-55-4 CAPLUS

Benzenepropanoic acid,  $3-[[(2,4-dichlorobenzoy1)amino]methyl]-4-methoxy-<math>\alpha-(2,2,3,3-tetrafluoropropoxy)-(9CI)$  (CA INDEX NAME)

RN 470669-79-5 CAPLUS

CN Benzenepropanoic acid, 3-[(2-chloro-4-propoxybenzoyl)] amino]methyl]-4,5-dimethoxy- $\alpha$ -(1-methylethoxy)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OMe} & \text{OMe} \\ \hline \\ \text{N-PrO} & \text{O} & \text{MeO} \\ \hline \\ \text{C-NH-} & \text{CH}_2 & \text{CH}_2 - \text{CH-} & \text{Co}_2 \text{E} \\ \hline \end{array}$$

REFERENCE COUNT:

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:793403 CAPLUS

DOCUMENT NUMBER:

137:310931

TITLE:

Preparation of phenylalkanoic acid derivatives as preventive or remedial agents for digestive tract

diseases

INVENTOR(S):

Horizoe, Tatsuo; Shinoda, Masanobu; Emori, Eita; Matsuura, Fumiyoshi; Kaneko, Toshihiko; Ohi, Norihito; Kasai, Shunji; Yoshitomi, Hideki; Yamazaki, Kazuto; Miyashita, Sadakazu; Hihara, Taro; Seiki, Takashi;

Clark, Richard; Harada, Hitoshi

PATENT ASSIGNEE(S):

Eisai Co., Ltd., Japan PCT Int. Appl., 344 pp.

DOCUMENT TYPE:

CODEN: PIXXD2

DOCUMENT TY

SOURCE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT N | 10.  |     |     | KIN | D   | DATE |      | i   | APPL: | ICAT: | I NOI | .OV |     | D   | ATE  |     |
|----------|------|-----|-----|-----|-----|------|------|-----|-------|-------|-------|-----|-----|-----|------|-----|
|          |      |     |     |     | -   |      |      |     |       |       |       |     |     |     |      |     |
| WO 20020 | 8089 | 9   |     | A1  |     | 2002 | 1017 | 1   | NO 2  | 002-  | JP30  | 06  |     | 2   | 0020 | 327 |
| W:       | ΑE,  | AG, | AL, | AM, | AT, | ΑU,  | AZ,  | BA, | BB,   | BG,   | BR,   | BY, | BZ, | CA, | CH.  | CN. |
|          |      |     |     |     |     | DK,  |      |     |       |       |       |     |     |     |      |     |
|          | GM,  | HR, | ΗU, | ID, | IL, | IN,  | IS,  | JP, | ΚE,   | KG,   | ΚP,   | KR, | ΚZ, | LC, | LK,  | LR, |

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NR, SN, TD, TG PRIORITY APPLN. INFO::

JP 2001-105131 A 20010403

OTHER SOURCE(S):

MARPAT 137:310931

GΙ

AB Disclosed is a preventive/remedy for digestive tract or inflammatory diseases, which contains as the active ingredient a novel carboxylic acid derivative represented by the following formula [I; R1 = H, OH, each (un) substituted C1-6 alkyl, C1-6 alkoxy, C1-6 alkylthio, C1-6 hydroxyalkyl, C1-6 hydroxyalkoxy, C1-6 hydroxyalkylthio, C1-6 aminoalkyl, C1-6 aminoalkoxy, C1-6 aminoalkylthio, C2-12 alkoxyalkyl, C3-7 cycloalkyl, C3-7 cycloalkyloxy, C3-7 cycloalkylthio, C2-6 alkenyl, C2-6 alkenyloxy, or C2-6 alkenylthio, etc.; L = a single or double bond, each (un)substituted C1-6 alkylene, C2-6 alkenylene, or C2-6 alkynylene; M = a single bond, each (un)substituted C1-6 alkylene, C2-6 alkenylene, or C2-6 alkynylene; T = a single bond, each (un)substituted C1-3 alkylene, C2-3 alkenylene, or C2-3 alkynylene; W = 2,4-dioxothiazolidin-5-yl, 2,4-dioxothiazolidin-5ylidene, carboxy, (un) substituted CONH2; X = 0, (un) substituted C2-6 alkenylene, hydroxymethylene, CO, CS, N-(un)substituted CQNH, NHCQ, SO2NH, NHSO2, or NHCQNH (Q = O, S); Y = (un)substituted C5-12 aromatic hydrocarbyl or C3-7 aliphatic hydrocarbyl optionally containing ≥1 heteroatoms; ring Z = C5-6 aromatic hydrocarbyl; Y = (un)substituted aromatic hydrocarbon group optionally containing ≥1 heteroatoms; some provisos given], a salt of the derivative, or a hydrate of either. The above digestive tract diseases include (1) inflammatory digestive tract diseases such as ulcerous colitis, Crohn's disease, pancreatitis, and gastritis, (2) digestive tract proliferative diseases such as digestive tract benign rumors, digestive tract polyp, hereditary (genetic) polyposis syndromes, colon cancer, rectum cancer, and stomach cancer, and (3) digestive tract ulcerous diseases such as duodenal ulcer, stomach ulcer, esophagus ulcer, regurgitant esophagitis, stress ulcer or erosion, erosion caused by drugs, and Zollinger-Ellison syndromes. The above inflammatory diseases include arthritic rheumatism, multiple sclerosis, immunodeficiency, cachexia, osteoarthritis, osteoporosis, asthma, and allergy. The compds. I are triple agonists for PPAR (peroxisome proliferator-activated receptor)  $\alpha$ ,  $\beta$ , and  $\gamma$  subtype. Thus, 2-isopropoxy-3-[4-methoxy-3-[[[4-(trifluoromethyl)benzyl]amino]carbonyl]phenyl]propanoic acid in vitro showed the transcription activity for PPAR $\alpha$ ,  $\beta$ , and  $\gamma$ with EC50 of 0.08, 2.513, and 0.382  $\mu M$ , resp., in CV-1 cell. (2S)-3-[3-[((2,4-dichlorobenzoyl)amino]methyl]-4-methoxyphenyl]-2isopropoxypropanoic acid at 1 mg/kg/day p.o. for 3 days showed a disease activity index based on diarrhea, bloody excrement, and weight loss (DAI) of 2.0±0.3 in mice suffering from colitis induced by dextran sulfate sodium salt vs. 2.8±0.2 for the control group and 2.1±0.3 for the mice treated with rosiglitazone at 30 mg/kg/day. Many compds. prepared do

not possess the thiazolidine skeleton and thereby may completely avoid toxicity such as liver disorder which was noted in the past as a problem for compds. having PPAR $\gamma$  agonist activity.

IT 334015-11-1P 334015-43-9P 334015-90-6P

334015-94-0P 472788-58-2P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of phenylalkanoic acid derivs. as peroxisome proliferator-activated receptor agonists and remedial or preventive agents for digestive tract or inflammatory diseases)

RN 334015-11-1 CAPLUS

CN Benzenepropanoic acid, 4-methoxy-α-(1-methylethoxy)-3-[[[4-(trifluoromethyl)phenyl]acetyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

RN 334015-43-9 CAPLUS

CN

Benzenepropanoic acid, 4-methoxy- $\alpha$ -(1-methylethoxy)-3-[[4-(trifluoromethyl)benzoyl]amino]methyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 334015-90-6 CAPLUS

CN Benzenepropanoic acid,  $3-[[(2,4-\text{dichlorobenzoyl})\,\text{amino}]\,\text{methyl}]-4-\text{methoxy-}\,$   $\alpha-(1-\text{methylethoxy})-,$  ethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

2001:886030 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 136:19941

Preparation of phenylpropionic acid derivatives as TITLE:

PPARα activators effective as

antiarteriosclerotics

Miyachi, Hiroyuki; Nomura, Masahiro; Takahashi, Yukie; Tanase, Takahiro; Murakami, Kouji; Suzuki, Masahiro INVENTOR(S):

PATENT ASSIGNEE(S): Kyorin Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 115 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

|          | ENT :                  |      |     |     | KIN         |     |      |      |               | APPL |      |      |     |     | D   | ATE  |     |  |
|----------|------------------------|------|-----|-----|-------------|-----|------|------|---------------|------|------|------|-----|-----|-----|------|-----|--|
|          | 2001                   |      |     |     | A1          |     | 2001 |      |               |      |      |      |     |     | 2   | 0010 | 525 |  |
|          | W:                     | ΑE,  | AG, | AL, | AM,         | ΑT, | AU,  | AZ,  | BA,           | BB,  | ВG,  | BR,  | BY, | ΒZ, | CA, | CH,  | CN, |  |
|          |                        | co,  | CR, | CU, | CZ,         | DE, | DK,  | DM,  | DZ,           | EC,  | EE,  | ES,  | FI, | GB, | GD, | GE,  | GH, |  |
|          |                        | GM,  | HR, | HU, | ID,         | IL, | IN,  | IS,  | JP,           | ΚE,  | KG,  | KP,  | KR, | ΚZ, | LC, | LK,  | LR, |  |
|          |                        | LS,  | LT, | LU, | LV,         | MA, | MD,  | MG,  | MK,           | MN,  | MW,  | MX,  | MZ, | NO, | ΝZ, | PL,  | PT, |  |
|          |                        | RO,  | RU, | SD, | SE,         | SG, | SI,  | SK,  | SL,           | ТJ,  | TM,  | TR,  | TT, | TZ, | UA, | UG,  | US, |  |
|          |                        | UZ,  | VN, | YU, | ZA,         | ZW, | AM,  | ΑZ,  | BY,           | KG,  | KZ,  | MD,  | RU, | ТJ, | TM  |      |     |  |
|          | RW:                    | GH,  | GM, | KE, | LS,         | MW, | MZ,  | SD,  | SL,           | SZ,  | ΤZ,  | UG,  | ZW, | ΑT, | BE, | CH,  | CY, |  |
|          |                        | DE,  | DK, | ES, | FI,         | FR, | GB,  | GR,  | ΙE,           | IT,  | LU,  | MC,  | NL, | PT, | SE, | TR,  | BF, |  |
|          |                        | ВJ,  | CF, | CG, | CI,         | CM, | GA,  | GN,  | GW,           | ML,  | MR,  | ΝE,  | SN, | TD, | TG  |      |     |  |
| AU       | AU 2001058838          |      |     |     | A5 20011211 |     |      |      | AU 2001-58838 |      |      |      |     |     |     |      |     |  |
| EP       | 1285                   | 908  |     |     | <b>A</b> 1  |     | 2003 | 0226 |               | EP 2 | 001- | 9322 | 62  |     | 2   | 0010 | 525 |  |
|          | R:                     | AT,  | BE, | CH, | DE,         | DK, | ES,  | FR,  | GB,           | GR,  | IT,  | LI,  | LU, | NL, | SE, | MC,  | PT, |  |
|          |                        |      |     |     |             |     | RO,  |      |               |      |      |      |     |     |     |      |     |  |
| US       | 2003                   | 1870 | 68  |     | A1          |     | 2003 | 1002 |               | US 2 | 002- | 2962 | 06  |     | 2   | 0021 | 129 |  |
| PRIORITY | PRIORITY APPLN. INFO.: |      |     |     |             |     |      |      |               | JP 2 | -000 | 1584 | 24  | i   | A 2 | 0000 | 529 |  |
|          |                        |      |     |     |             |     |      |      |               | WO 2 | 001- | JP43 | 85  | 1   | w 2 | 0010 | 525 |  |
| OTHER SO | OTHER SOURCE(S):       |      |     |     |             | PAT | 136: | 1994 | 1             |      |      |      |     |     |     |      |     |  |

GΙ

$$\underset{\text{Ph}}{\overbrace{\hspace{1.5cm}}}\underset{\text{MeO}}{\overset{\text{NH}}{\longrightarrow}}\underset{\text{CO}_2H}{\overset{\text{CO}_2H}{\longrightarrow}}$$
 II

AB Title compds. [I; R1 = alkyl, alkoxy, trifluoromethyl, trifluoromethoxy, Ph, phenoxy, benzyloxy; R2 = H, alkyl, alkoxy; R3 = alkoxy; A = CH2CONH, NHCOCH2, CH2CH2CO, CH2CH2CH2, CH2CH2O, CONHCH2, CH2NHCH2, COCH2CO, COCH2NH, NHCH2CO], stereoisomers, and pharmaceutically acceptable salts, which bind to human peroxisome proliferator activated receptor  $\alpha$  (PPAR $\alpha$ ) as ligand to activate the receptor and thereby exhibit a potent lipid-decreasing effect, are prepared as antiarteriosclerotics. Thus, the title compound II was prepared and biol. tested for transcription activation effect with EC50( $\mu$ mol/L) = 0.05.

IT 378231-91-5P

CN

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (Preparation of phenylpropionic acid derivs. as PPARα activators effective as antiarteriosclerotics)

RN 378231-91-5 CAPLUS

Benzenepropanoic acid,  $\alpha$ , 4-dimethoxy-3-[[(4-phenoxyphenyl)acetyl]amino]- (9CI) (CA INDEX NAME)

## IT 378231-90-4P 378231-92-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (Preparation of phenylpropionic acid derivs. as PPAR $\alpha$  activators effective as antiarteriosclerotics)

RN 378231-90-4 CAPLUS

CN Benzenepropanoic acid, α,4-dimethoxy-3-[[[4-(phenylmethoxy)phenyl]acetyl]amino]- (9CI) (CA INDEX NAME)

RN 378231-92-6 CAPLUS

Benzenepropanoic acid,  $3-[([1,1'-biphenyl]-4-ylacetyl)amino]-\alpha,4-$ CN dimethoxy- (9CI) (CA INDEX NAME)

IT 378231-27-7P 378231-57-3P 378231-58-4P 378231-59-5P 378231-60-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(Preparation of phenylpropionic acid derivs. as PPARa activators effective as antiarteriosclerotics)

378231-27-7 CAPLUS RN

Benzenepropanoic acid, a, 4-dimethoxy-3-[[[4-CN (trifluoromethyl)phenyl]acetyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

378231-57-3 CAPLUS

RN CN Benzenepropanoic acid,  $\alpha$ , 4-dimethoxy-3-[[[4-(phenylmethoxy)phenyl]acetyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

RN 378231-58-4 CAPLUS

CN Benzenepropanoic acid,  $\alpha$ , 4-dimethoxy-3-[[(4-phenoxyphenyl)acetyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

RN 378231-59-5 CAPLUS

CN Benzenepropanoic acid,  $3-[([1,1'-biphenyl]-4-ylacetyl)amino]-\alpha,4-dimethoxy-, ethyl ester (9CI) (CA INDEX NAME)$ 

RN 378231-60-8 CAPLUS

CN Benzenepropanoic acid, α,4-dimethoxy-3-[[[4-(trifluoromethyl)phenyl]acetyl]amino]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

7

ACCESSION NUMBER:

2001:265369 CAPLUS 134:295620

DOCUMENT NUMBER: TITLE:

Preparation and effect of 4-methoxyphenylpropionic

acid derivatives useful in insulin resistance

improvement

INVENTOR(S):

Shinoda, Masanobu; Emori, Eita; Matsuura, Fumiyoshi; Kaneko, Toshihiko; Ohi, Norihito; Kasai, Shunji;

Yoshitomi, Hideki; Yamazaki, Kazuto; Miyashita, Sadakazu; Hibara, Taro; Seiki, Hisashi; Clark,

Richard; Harada, Hitoshi Eisai Co., Ltd., Japan

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 350 pp.

DOCUMENT TYPE:

CODEN: PIXXD2 Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO.                        | KIND DATE        | APPLICATION NO.   | DATE   |
|-----------------------------------|------------------|---|--|
| W: AU, BR, CA,<br>RW: AT, BE, CH, | CN, HU, IL, JP,  | WO 2000-JP6788<br>KR, MX, NO, NZ, RU,<br>FI, FR, GB, GR, IE,                          | US, ZA   |
| EP 1216980                        | A1 20020626      | AU 2000-74499<br>EP 2000-962993<br>GB, GR, IT, LI, LU,                                | 20000929   |
| PRIORITY APPLN. INFO.:            |                  | JP 1999-282079<br>JP 1999-369442<br>JP 2000-38795<br>JP 2000-104260<br>WO 2000-JP6788 | A 19991001<br>A 19991227<br>A 20000216<br>A 20000406<br>W 20000929 |
| OTHER SOURCE(S):                  | MARPAT 134:29562 | 20  |  |

OTHER SOURCE(S):

GI

AB Title compds. [Y:L:X:TZM:CWR1; Rl is hydrogen, hydroxyl, alkyl; L is single bond, double bond, alkylene; M is single bond, alkylene; T is single bond, alkylene; W is carboxyl, amide; X is oxygen, alkenylene; Y is aromatic hydrocarbon; Z is aromatic hydrocarbon; colon represents single, or double bond], salts, esters, and hydrates are prepared and are useful in prevention or treatment of diabetes and X-syndrome. Thus, the title compound I was prepared and biol. tested.

Ι

IT 334010-93-4P 334010-94-5P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological
 study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation and effect of methoxyphenylpropionic acid derivs. useful in
 insulin resistance improvement as PPAR agonists)

RN 334010-93-4 CAPLUS

CN Benzenepropanoic acid, 3-[[[2-fluoro-4-(trifluoromethyl)benzoyl]amino]meth
yl]-4-methoxy-α-(1-methylethoxy)-, (αS)- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.

RN 334010-94-5 CAPLUS

CN Benzenepropanoic acid, 3-[[(2,4-dichlorobenzoyl)amino]methyl]-4-methoxy- $\alpha$ -(1-methylethoxy)-, ( $\alpha$ S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 334015-11-1P 334015-43-9P 334015-90-6P
 334015-92-8P 334015-94-0P 334015-96-2P
 334018-48-3P 334019-09-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

10/088,916

(preparation and effect of methoxyphenylpropionic acid derivs. useful in insulin resistance improvement as PPAR agonists)

RN 334015-11-1 CAPLUS CN Benzenepropanoic ac

Benzenepropanoic acid, 4-methoxy- $\alpha$ -(1-methylethoxy)-3-[[[4-(trifluoromethyl)phenyl]acetyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

RN 334015-43-9 CAPLUS

CN Benzenepropanoic acid,  $4\text{-methoxy-}\alpha\text{-}(1\text{-methylethoxy})\text{-}3\text{-}[[4\text{-}(\text{trifluoromethyl})\text{benzoyl}]\text{amino}]\text{methyl}]\text{-}, ethyl ester (9CI) (CA INDEX NAME)$ 

RN 334015-90-6 CAPLUS

CN Benzenepropanoic acid, 3-[[(2,4-dichlorobenzoyl)amino]methyl]-4-methoxyα-(1-methylethoxy)-, ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{O OPr-i} \\ \text{EtO-C-CH-CH}_2 \\ \text{Cl} \\ \text{Cl} \\ \text{OMe} \end{array}$$

RN 334015-92-8 CAPLUS

CN Benzenepropanoic acid, 3-[(2,4-dichlorobenzoyl)] amino]methyl]-4-methoxy- $\alpha-(1-\text{methylethoxy})-(9CI)$  (CA INDEX NAME)

$$\begin{array}{c|c} & \text{OPr-i} \\ & \text{HO}_2\text{C}-\text{CH}-\text{CH}_2 \\ \text{Cl} & \text{C}-\text{NH}-\text{CH}_2 \\ & \text{Cl} & \text{OMe} \end{array}$$

RN 334015-94-0 CAPLUS

CN Benzenepropanoic acid, 3-[[(4-chloro-2-fluorobenzoyl)amino]methyl]-4-methoxy-α-(1-methylethoxy)-, ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{O OPT-i} \\ \parallel & \parallel \\ \text{EtO-C-CH-CH}_2 \\ \hline \text{Cl} & \bigcirc \\ \text{C-NH-CH}_2 \\ \hline \end{array}$$

RN 334015-96-2 CAPLUS

CN Benzenepropanoic acid,  $3-[[(4-\text{chloro}-2-\text{fluorobenzoyl})\,\text{amino}]\,\text{methyl}]-4-\text{methoxy}-\alpha-(1-\text{methylethoxy})-(9CI)$  (CA INDEX NAME)

RN 334018-48-3 CAPLUS

CN Benzenepropanoic acid, 4-methoxy- $\alpha$ -(1-methylethoxy)-3-[[[4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)benzoyl]amino]methyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 334019-09-9 CAPLUS
CN Benzenepropanoic acid, 3-[[(4-bromobenzoyl)amino]methyl]-4-methoxy-α-(1-methylethoxy)-, ethyl ester (9CI) (CA INDEX NAME)

IT 334010-72-9P 334010-77-4P 334010-80-9P 334010-81-0P 334010-88-7P 334010-89-8P 334010-91-2P 334010-95-6P 334011-61-9P 334011-62-0P 334011-63-1P 334011-64-2P 334011-65-3P 334011-66-4P 334011-67-5P 334011-68-6P 334011-69-7P 334011-70-0P 334011-71-1P 334011-72-2P 334011-75-5P 334011-76-6P 334011-93-7P 334011-94-8P 334011-95-9P 334012-01-0P 334012-02-1P 334012-03-2P 334012-09-8P 334012-10-1P 334012-11-2P 334012-16-7P 334012-17-8P 334012-18-9P 334012-25-8P 334012-26-9P 334012-27-0P 334012-32-7P 334012-34-9P 334012-35-0P 334012-36-1P 334012-37-2P 334012-38-3P 334012-39-4P 334012-40-7P 334012-41-8P 334012-42-9P 334012-43-0P 334012-44-1P 334012-45-2P 334012-46-3P 334012-47-4P 334012-48-5P 334012-49-6P 334012-50-9P 334012-51-0P 334012-53-2P 334012-54-3P 334012-56-5P 334012-57-6P 334012-59-8P 334012-60-1P 334012-62-3P 334012-63-4P 334012-65-6P 334012-66-7P 334012-71-4P 334012-72-5P 334013-00-2P 334013-52-4P 334013-53-5P 334013-54-6P 334013-55-7P 334013-56-8P 334013-58-0P 334013-59-1P 334013-60-4P 334013-61-5P 334013-62-6P 334013-63-7P 334013-64-8P 334013-65-9P 334013-66-0P 334013-67-1P 334013-68-2P 334013-69-3P 334013-70-6P RN CN 334013-71-7P 334013-72-8P 334013-73-9P
334013-74-0P 334013-75-1P 334013-76-2P
334013-77-3P 334013-78-4P 334013-79-5P
334013-83-1P 334013-81-9P 334013-82-0P
334013-83-1P 334013-85-3P 334013-86-4P
334013-87-5P 334013-90-0P 334013-92-2P
334014-11-8P 334014-13-0P 334014-16-3P
334014-18-5P 334014-20-9P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and effect of methoxyphenylpropionic acid derivs. useful in insulin resistance improvement as PPAR agonists)
334010-72-9 CAPLUS
Benzenepropanoic acid, 4-methoxy-α-(1-methylethoxy)-3-[[[4-(trifluoromethyl)phenyl]acetyl]amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{OPr-i} \\ & \text{HO}_2\text{C}-\text{CH}-\text{CH}_2 \\ \\ & \text{CH}_2-\text{C}-\text{NH} \end{array}$$

RN 334010-77-4 CAPLUS

CN Benzenepropanoic acid, 4-methoxy-α-(1-methylethoxy)-3-[[[4-(trifluoromethyl)benzoyl]amino]methyl]- (9CI) (CA INDEX NAME)

RN 334010-80-9 CAPLUS

CN Benzenepropanoic acid, 4-methoxy-3-[[[2-methoxy-4-(trifluoromethyl)benzoyl]amino]methyl]- $\alpha$ -(1-methylethoxy)- (9CI) (CA INDEX NAME)

RN 334010-81-0 CAPLUS

CN Benzenepropanoic acid, 3-[[[2-fluoro-4-(trifluoromethyl)benzoyl]amino]meth yl]-4-methoxy-α-(1-methylethoxy)- (9CI) (CA INDEX NAME)

RN 334010-88-7 CAPLUS

CN Benzenepropanoic acid, 3-[[(2,4-dichlorobenzoyl)amino]methyl]-4-methoxy- $\alpha$ -(1-methylethoxy)-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 334010-89-8 CAPLUS

CN

Benzenepropanoic acid,  $3-[[(4-\text{chloro}-2-\text{fluorobenzoyl})\,\text{amino}]\,\text{methyl}]-4-\text{methoxy-}\alpha-(1-\text{methylethoxy})-, monosodium salt (9CI) (CA INDEX NAME)$